contextware

transforming tacit knowledge into organizational assets

Centers for Medicare & Medicaid Services (CMS)
Second Annual Knowledge Management and
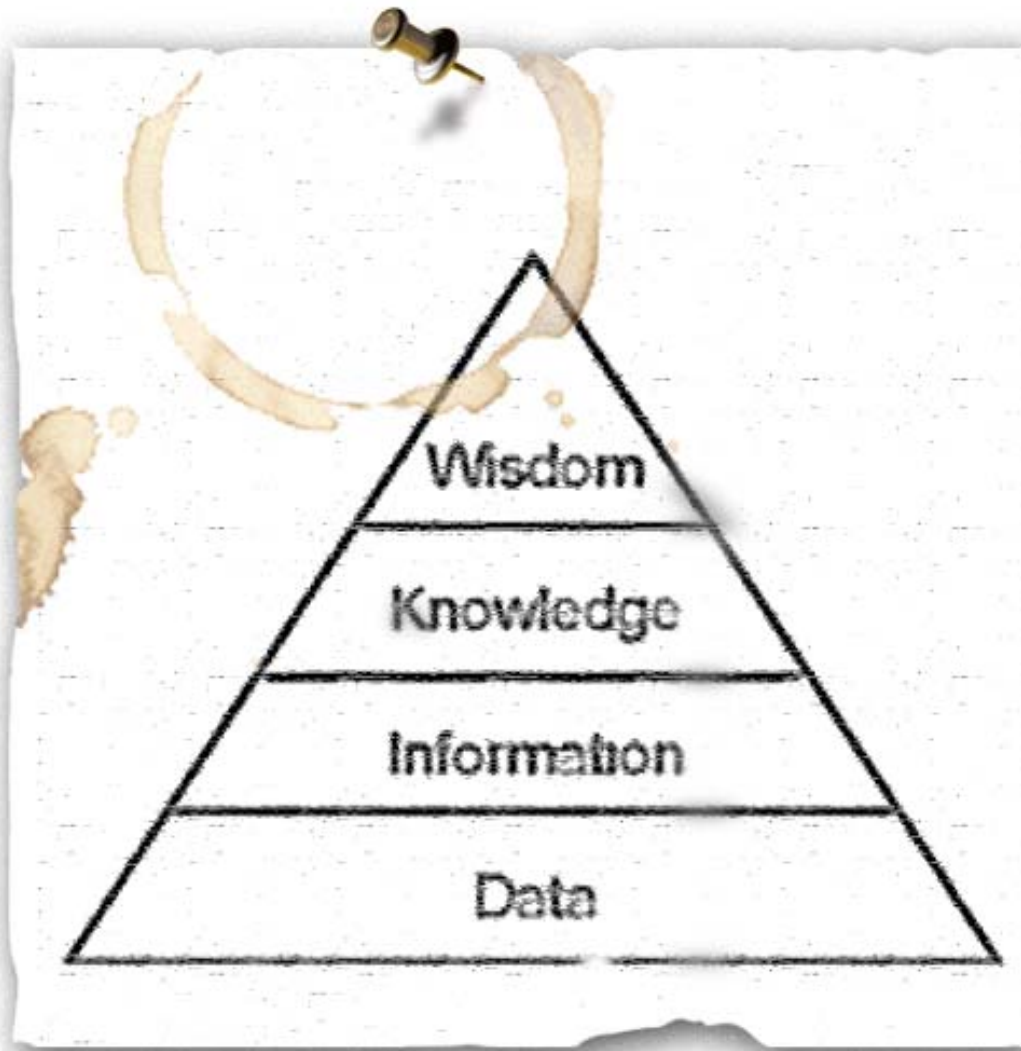## Information Sharing Fair

May 4, 2005

agenda

- A Brief History

- Working Knowledge Management

- A Practical Example

classic KM defined

contextware
connecting people, process & information
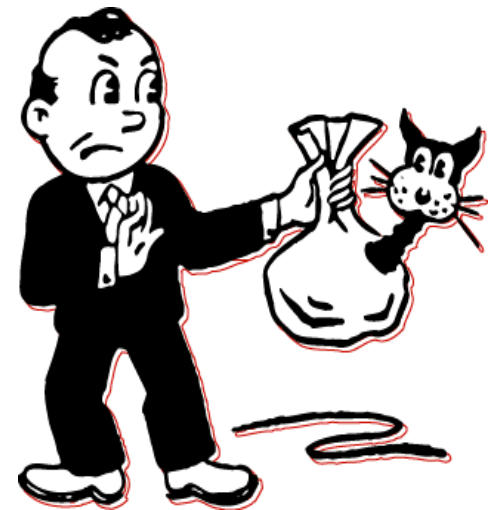
Traditional Approaches: Storytelling

Promise:

- Painless, cost effective way to capture "nuggets" of anecdotal, tacit experience
- Questionnaires, video

Reality:

- "Unstructured" knowledge not easily accessible, or demands more and more complex technology to access (video loggers, for example)
- Can be difficult to divine value of video "nuggets" without context

Traditional Approaches: Communities of Practice

Promise:

- Collaborative, where the best minds can share experiences and best practices, answer questions, mentor, leave "trail" of knowledge
- Discussion groups, blogs

Reality:

- Loosely organized, tough to navigate and validate the information
- Who has the time to contribute – those that do?
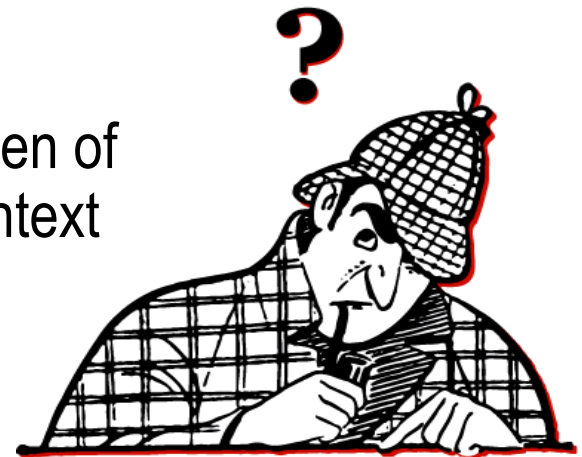
Traditional Approaches: Categorization & Indexing

Promise:

- Categorizing, indexing digital content creates virtual repository of high-value intellectual "assets
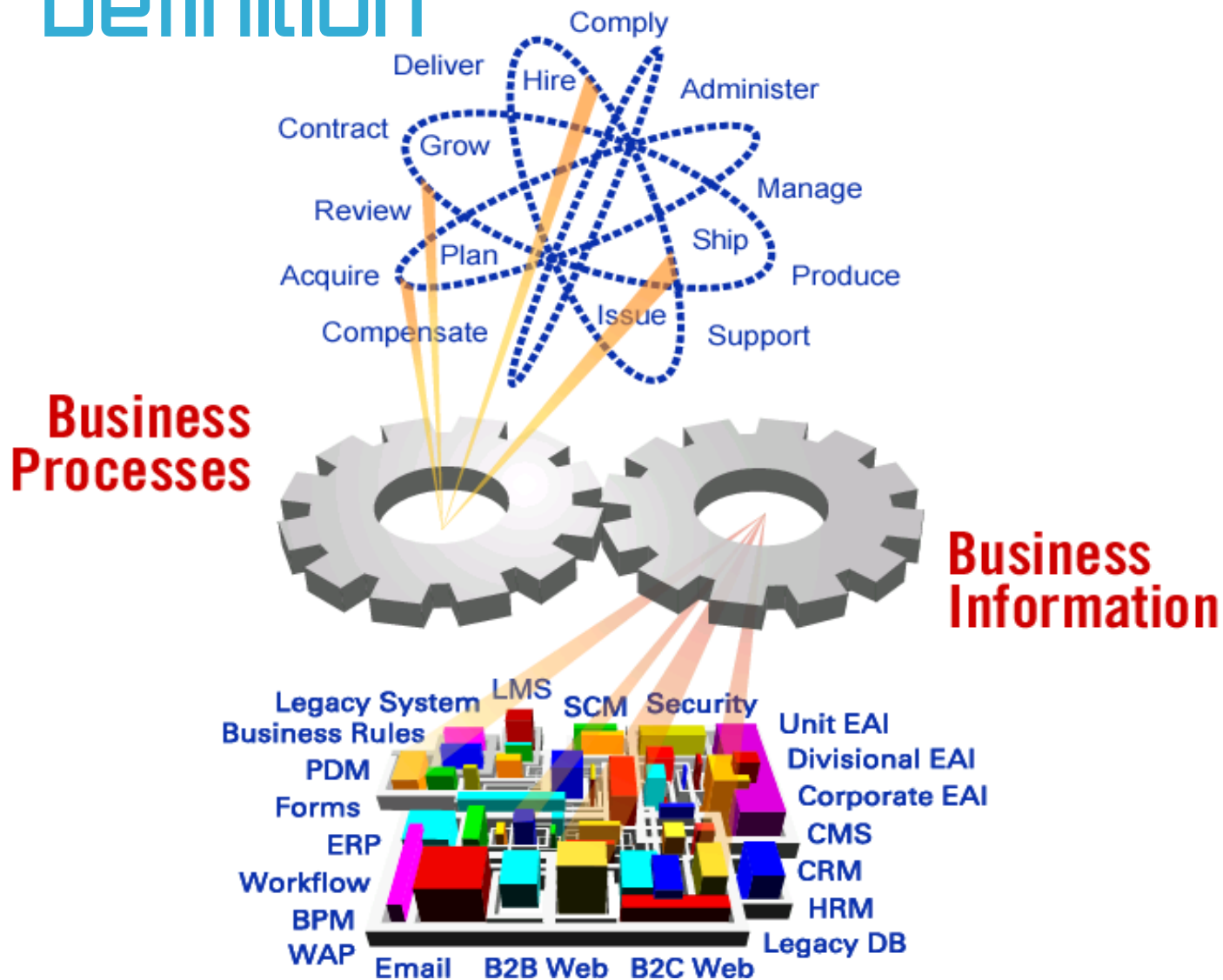- Search engines, content management

Reality:

- Still have to wade through screen after screen of search results, trying to divine meaning, context from extracted keywords
- Not all assets are created equal

A More comprehensive Definition

Comply
Deliver
Hire
Administer
Contract
Grow
Manage
Review
Ship
Plan
Acquire
Produce
Compensate
Issue
Support

Business Processes

Business Information

Legacy System LMS SCM Security
Business Rules
PDM
Forms
ERP
Workflow
BPM
WAP Email B2B Web B2C Web

Unit EAI
Divisional EAI
Corporate EAI
CMS
CRM
HRM
Legacy DB

Business process can turn tacit knowledge into explicit knowledge.

why?

Business Process:

A collection of related, structured activities
– a chain of events – that produce a
specific service or product for a particular
customer or customers.

-*Government Accountability Office*

working
knowledge management

- *Conceptually:*
  - Process is the glue that connects the right people to the right information at the right time

contextware
connecting people, process & information

working
knowledge management

- *Functionally:* sustainable and scaleable
    - Rigor and consistency
    - Broadly Applicable
    - Adoptable
    - Easy to Use
    - Useful
    - Perceived and actual value
    - Defensible

The Benefits of Process Thinking

- Codifies, communicates business rules

- Consistency

- Provides structure

- Extracts rich view of the activity
  - Step by step
  - Identifies all required resources, content at each step

- Lets you drill down to where the pain is
  - And lets you provide excruciating clarity if required

- Multidimensional

Business Activities are Multidimensional

- Inputs
  - What drives or initiates the current activity.
- Guidelines
  - Information-rich resources that guide, and/or regulate.
- Content
  - Relevant documentation, media and templates.
- People
  - Who performs the activity?
- Tools
  - What kind of hardware and software are needed?
- Outputs
  - The expected outcome from performing the activity.

contextware
connecting people, process & information

so Let's apply this

Activity decomposition

Ship Materials
  Pack Articles
  Specify Carrier
  Complete Form
  Approve
  Schedule P/U

Describe It

Ship Materials

Pack Articles
Specify Carrier
Complete Form
Approve
Schedule P/U

In order for the assistant to send a package, they must determine the exact items that are being sent.

The assistant will use a request form for anything over 10lbs or being sent overseas.

The administrative officer must approve such shipments.

Activity Resources

Ship Materials
  Pack Articles
  Specify Carrier
  Complete Form
  Approve
  Schedule P/U

In order for the assistant to send a package, they must determine the exact items that are being sent.

The assistant will use a request form for anything over 10lbs or being sent overseas.

The administrative officer must approve such shipments.

Inputs:
  Ship Request
Guidelines:
  Approved Carriers
  Shipping Guideline
Content:
  Form HHS-2050
  Shipping Label
People:
  Shipping Clerk
  Admin Officer
Tools:
  Shipping Software
  Packing Material
Outputs:
  Approved Shipment

Drill down, and do it again

Ship Materials
 Pack Articles
 Specify Carrier
  Weigh
  Select Method
  Compare Price
 Complete Form
 Approve
 Schedule P/U

To determine a carrier, the assistant should first determine the weight of the package, the method of delivery (ground, air, ocean) and then check pricing with all carriers on the approved carrier list that carry that specific type of package. In all cases, choose the least cost method.

Inputs:
 Wrapped Package
Guidelines:
 Approved Carriers
 Pricing List
Content:
 Carrier Specs
People:
 Carrier Rep
Tools:
 Shipping Software
Outputs:
 Selected Carrier

results...now web enable

- Knowledge Artifacts Organized by Activity

- Searchable by Activity

- Web Delivered

- Centralized content taxonomy built from process

- Minimize redundancy of content, resources

- No searching, anecdotes or videotaping required

contextware
connecting people, process & information

Broad organizational impact

- Culture
- Compliance
- Business continuity
- Productivity
- Maximizes existing IT investments
- Defines, gathers requirements for IT investment
- Attrition
- Intellectual capital
- Continuous improvement

questions and more. . .

Learn more at http://www.contextware.com

Contextware, Inc.
4216 Evergreen Lane, Suite 111
Annandale, VA 22003 USA
800.371.7969

contextware
connecting people, process & information

contextware

appendix

contextware semantics

Activity: Where someone delivers an expected outcome within constraints.

Asset: A physical instance of a topic (a file, a book, a query, a website)

Context: The precise relevance or role of a topic to an activity.

Metadata: Data about data.

Multidimensional: The many facets or dimensions of a business activity made clear by utilizing a system view of a process.

Process: A collection of related activities.

State: Method of representing non-hierarchical, space/time relationships between asset types.

Taxonomy: A way of classifying or categorizing.

Topic: A taxonomical label for describing the hierarchical relationships of asset types.

User: Someone with access to the system.

■ Key terms

contextware
connecting people, process & information